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PATENT ABSTRACTS OF JAPAN

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TAKEUCHI AKIHIKO**(54) **IMAGE FORMING DEVICE**

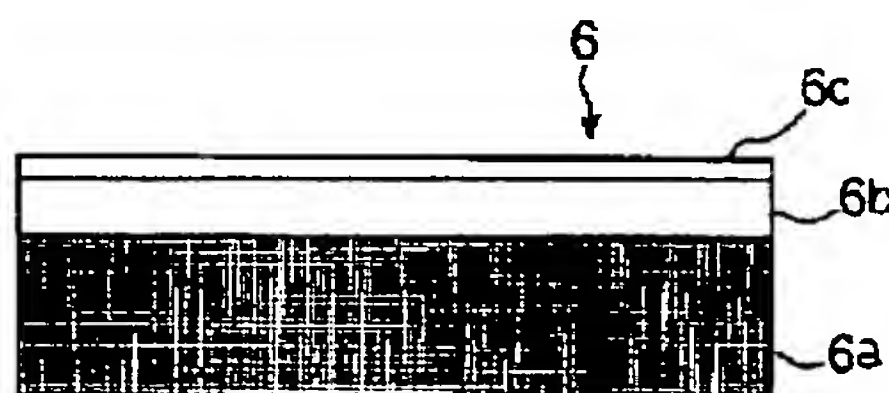
(57) Abstract:

PROBLEM TO BE SOLVED: To prevent generation of a sharkskin-like image without causing scattering of toner on an intermediate transfer body surface by forming a second layer having a specified layer thickness and controlling the volume resistivity of the second layer to be smaller than that of a first layer.

SOLUTION: The volume resistivity of an electric charge discharging layer 6c is controlled to be smaller than the volume resistivity of a high resistance layer 6b, and the discharging layer 6c is formed to 1 to 5 μm thickness on the high resistance layer 6b of an intermediate transfer belt 6. Thereby, generation of a sharkskin-like image can be prevented without causing scattering of a toner image. As for the high resistance layer 6b, a material prepared by mixing a fluorine-based material with a urethane material and controlling the volume resistivity to $10^{14} \Omega\cdot\text{cm}$ is used. The discharging layer 6c is also formed by using a material prepared by mixing a fluorine-based material with a urethane material. By selecting a urethane material having smaller volume resistivity for the discharging layer 6c than that of the urethane material for the high

resistance layer, the volume resistivity of the mixed material is controlled to $10^{13} \Omega\cdot\text{cm}$.

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Intermediate transfer belt structure for electrophotographic color copier, printer

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Abstract (Basic): JP 11352785 A

NOVELTY - The intermediate transfer belt (6) has an electric charge discharge layer (6c) of 1-5 μ m thickness, formed on high resistant layer (6b). The volume resistivity of discharge layer is smaller than that of the resistant layer.

USE - In electrophotographic color copier, printer.

ADVANTAGE - Since volume resistivity of electric charge discharge layer is made smaller than that of high resistant layer, generation of jump expulsion of toner image is prevented.

DESCRIPTION OF DRAWING(S) - The figure shows the sectional view of intermediate transfer belt of copier.

Intermediate transfer belt (6)

High resistant layer (6b)

Electric charge discharge layer (6c)

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Title Terms: INTERMEDIATE; TRANSFER; BELT; STRUCTURE;
ELECTROPHOTOGRAPHIC;

COLOUR; COPY; PRINT

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